

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for making a negative-working lithographic master for wet offset lithographic printing of an image on a printing medium, comprising the steps of:
 - (a) coating a layer of positive-working radiation-imageable medium onto a hydrophilic lithographic base;
 - (b) forming a mask on ~~the a~~ surface of said radiation-imageable medium without substantially chemically altering said radiation-imageable medium, said mask being in the form of said image to create masked areas and unmasked areas and said mask substantially resistant to a developer; and
 - (c) without allowing said radiation-imageable medium to become substantially exposed by ultraviolet radiation, exposing said layer of radiation-imageable medium to said developer to remove ~~the areas of said radiation-imageable medium that are not covered by said mask~~ said radiation-imageable medium from said unmasked areas and to uncover said hydrophilic lithographic base in said unmasked areas.
2. (Cancelled)
3. (Currently Amended) A method for making a negative-working lithographic master for wet offset lithographic printing of an image on a printing medium, comprising the steps of:
 - (a) providing a lithographic precursor comprising a layer of positive-working radiation-imageable medium coated on a hydrophilic lithographic base;

- (b) forming a mask on ~~the~~ a surface of said radiation-imageable medium without substantially chemically altering said radiation-imageable medium, said mask being in the form of said image to create masked and unmasked areas and said mask substantially resistant to a developer; and
 - (c) without allowing said radiation-imageable medium to become substantially exposed by ultraviolet radiation, exposing said layer of radiation-imageable medium to said developer to remove ~~the areas of said medium that are not covered by said mask~~ said radiation-imageable medium from said unmasked areas and to uncover said hydrophilic lithographic base in said unmasked areas.
- 4. (Currently Amended) A method for making a negative-working lithographic master from a positive-working radiation-imageable medium, comprising the ~~step~~ steps of: imagewise depositing droplets of a masking fluid onto a layer of positive-working radiation-imageable medium on a hydrophilic lithographic base without substantially chemically altering said radiation-imageable medium; and without allowing said radiation-imageable medium to become substantially exposed by ultraviolet radiation, removing said radiation-imageable medium to uncover said hydrophilic base in regions where said masking fluid has not been applied by exposure of said radiation imageable medium to one or more developing chemicals.
- 5. (Withdrawn) A method of performing wet offset printing of an image on a printing medium, comprising the steps of: (a) providing an offset lithographic precursor comprising a layer of positive-working radiation-imageable medium on a hydrophilic lithographic base; (b) forming a mask upon the surface of said radiation-imageable medium, said mask being in the form of said image and substantially resistant to a developer; (c) forming a lithographic master by exposing said layer of radiation-imageable medium to said developer to remove the areas of said developer that are not covered by said mask; and (d) performing wet offset lithographic printing with said lithographic master.

6. (Withdrawn) A method for wet offset printing, said method comprising the steps of: (a) making a negative-working lithographic master from a positive-working radiation-imageable medium; and (b) performing wet offset lithographic printing with said lithographic master.
7. (Original) A negative-working lithographic master produced in accordance with the method of claim 1.
8. (Currently Amended) A ~~lithographic master in accordance with~~ method according to claim 6 1 wherein said hydrophilic lithographic base is comprises one of:
 - (a) a disposable plate;
 - (b) a re-usable plate;
 - (c) a printing cylinder of a printing press; and
 - (d) a seamless sleeve for a printing cylinder of a printing press.
9. (Cancelled)
10. (Currently Amended) A masked lithographic printing precursor for use in ~~the~~ wet offset printing of an image, the printing precursor comprising:
 - (a) a hydrophilic lithographic base;
 - (b) a layer of positive-working radiation-imageable medium coated on said base; and
 - (c) a mask formed upon the surface of said layer of radiation-imageable medium without substantially chemically altering said radiation-imageable medium, said mask being in the form of said image to create masked areas and unmasked areas and said mask substantially resistant to a developer;
wherein said printing precursor is developable, without allowing said radiation-imageable medium to become substantially exposed by ultraviolet radiation, to remove said

radiation-imageable material from said unmasked areas and to uncover said hydrophilic lithographic base in said unmasked areas.

11. (Original) A method according to claim 1 wherein said step of forming a mask comprises depositing droplets of a masking fluid.
12. (Original) A method according to claim 11 wherein said depositing is done by means of an inkjet printer.
13. (Original) A method according to claim 1 wherein said step of forming a mask includes the steps of curing said mask.
14. (Original) A method according to claim 13 wherein said curing is done by heating.
15. (Original) A method according to claim 14 wherein said heating is done at a temperature in the range of 40 - 130E C for a time in the range of 10 seconds to 3 minutes.
16. (Original) A method according to claim 1 further comprising the step of hardening the part of said layer of medium that remains on said base.
17. (Original) A method according to claim 1 further comprising, after step (c), the step of removing said mask.
18. (Original) A method according to claim 11 wherein said masking fluid comprises an indicator dye.
19. (Original) A method according to claim 11 wherein said masking fluid comprises an active masking ingredient and a solvent.

20. (Original) A method according to claim 19 wherein said solvent comprises water.
21. (Original) A method according to claim 19 wherein said solvent comprises an organic solvent.
22. (Original) A method according to claim 19 wherein said solvent comprises water and an organic solvent.
23. (Currently Amended) A method according to claim ~~9~~ 19 wherein said masking fluid comprises a nitrogen-containing compound wherein at least one nitrogen atom is:
 - (a) quarternized; or
 - (b) incorporated in a heterocyclic ring; or
 - (c) both quarternized and incorporated in a heterocyclic ring.
24. (Currently Amended) A method according to claim 23 wherein said nitrogen-containing compound is one of ~~sub-paragraph~~:
 - (a) a triaryl methane dye, and
 - (b) a tetraalkyl ammonium compound.
25. (Original) A method according to claim 23 wherein said nitrogen-containing compound is one of:
 - (a) a quinoline;
 - (b) a triazole;
 - (c) an imidazole; and
 - (d) an indole.
26. (Original) A method according to claim 25 wherein said nitrogen-containing compound is 1,2,4-triazole.

27. (Original) A method according to claim 24 wherein said nitrogen-containing compound is one of:
- (a) Crystal Violet;
 - (b) Ethel Violet; and
 - (c) Basic Blue 7.
28. (Original) A method according to claim 24 wherein said nitrogen-containing compound is one of:
- (a) cetrimide; and
 - (b) a benzotrimethyl ammonium salt.
29. (Original) A method according to claim 23 wherein said nitrogen-containing compound is a quinolinium compound.
30. (Original) A method according to claim 29 wherein said quinolinium compound is one of:
- (a) 1-ethyl-2-methyl quinolinium iodide; and
 - (b) 1-ethyl-4-methyl quinolinium iodide.
31. (Original) A method according to claim 23 wherein said nitrogen-containing compound is a benzothiazolylidene compound.
32. (Original) A method according to claim 31 wherein said benzothiazolylidene compound is 3-ethyl-2-methyl benzothiazolium iodide.
33. (Original) A method according to claim 23 wherein said nitrogen-containing compound is a pyridinium compound.
34. (Original) A method according to claim 33 wherein said pyridinium compound is one of:

- (a) cetyl pyridinium bromide;
 - (b) ethyl viologen dibromide; and
 - (c) fluoropyridinium tetrafluoroborate.
35. (Original) A method according to claim 29 wherein said quinolinium compound is a cationic cyanine dye.
36. (Original) A method according to claim 35 wherein said dye is one of:
- (a) Dye A; and
 - (b) Quinoldine Blue.
37. (Original) A method according to claim 31 wherein said benzothiazolium compound is 3-ethyl-2-[3-ethyl-2(3H)-benzothiazoylidene)-2-methyl-1-propenyl] benzothiazolium iodide.
38. (Original) A method according to claim 11 wherein said masking fluid comprises one of:
- (a) a flavone;
 - (b) a flavonone;
 - (c) an isoflavanone;
 - (d) a coumarin;
 - (e) a chromone;
 - (f) an indeneone;
 - (g) a chalcone;
 - (h) a xanthone;
 - (i) a thioxanthone;
 - (j) benzophenone;
 - (k) a phthalimide; and
 - (l) a phenanthrenequinone.

39. (Original) A method according to claim 38 wherein said flavone is one of:
- (a) 7,8-benzoflavone;
 - (b) trihydroxyflavone; and
 - (c) naphthaflavone.
40. (Original) A method according to claim 38 wherein said flavanone is hydroxy-dimethoxyflavanone.
41. (Original) A method according to claim 11 wherein said masking fluid comprises a poly substituted siloxane.
42. (Original) A method according to claim 41 wherein said siloxane is polyphenylsiloxane.
43. (Original) A method according to claim 11 wherein said masking fluid comprises a substituted pyran.
44. (Original) A method according to claim 11 wherein said making fluid comprises a perfluorinated compound.
45. (Original) A method according to claim 11 wherein said masking fluid comprises acridine orange base.
46. (Original) A method according to claim 19 wherein the amount of said active masking ingredient is in the range of 0.5 - 5 weight % of said masking fluid.
47. (Original) A method according to claim 11 wherein said masking fluid further comprises one or more of:
- (a) a humidifying co-solvent;
 - (b) a dye;

- (c) a surfactant or wetting agent; and
 - (d) a biocide.
48. (Original) A method according to claim 1 wherein said radiation-imageable medium is a quinonediazide.
49. (Original) A method according to claim 48 wherein said quinonediazide is a 1,2-naphthoquinone-2-diazide-4- or -5- sulfonyl derivative.
50. (Original) A method according to claim 48 wherein said quinonediazide is a naphthoquinonediazide.
51. (Original) A method according to claim 50 wherein the amount of said naphthoquinonediazide is in the range of 3 - 50 weight % relative to the weight of non-volatile components of said radiation-imageable medium.
52. (Original) A method according to claim 1 wherein said radiation-imageable medium comprises a binder.
53. (Original) A method according to claim 52 wherein said binder is a novolak polycondensate.
54. (Original) A method according to claim 52 wherein said binder is a polyhydroxyphenyl resin.
55. (Original) A method according to claim 52 wherein said binder is a polymer or copolymer of an acrylic or methacrylic acid ester with a polyhydricphenol.

56. (Original) A method according to claim 52 wherein the amount of said binder is in the range of 30 - 90 % by weight relative to total solids in said medium.
57. (Original) A method according to claim 52 wherein the amount of said binder is in the range of 50 - 85 % by weight relative to total solids in said medium.
58. (Original) A method according to claim 52 wherein said binder has pheonolic hydroxyl groups present in the range of about 1 - 15 mmol/g and a molecular weight up to 100,000.
59. (Original) A method according to claim 52 wherein said binder comprises a combination of a cresol/formaldehyde novolak and an unplasticized, alkyl-etherified melamine/formaldehyde resin.
60. (Original) A method according to claim 1 wherein said radiation-imageable medium comprises or more of:
- (a) a polyglycol;
 - (b) a cellulose derivative;
 - (c) a dye;
 - (d) an adhesion promoter;
 - (e) a pigment; and
 - (f) a UV-absorber.
61. (Original) A method according to claim 1 wherein said step of coating comprises dissolving said radiation-imageable medium in a solvent and applying it by one of:
- (a) spraying;
 - (b) dipping;
 - (c) roller application;
 - (d) slot dies;
 - (e) blade application; and

(f) coater application.

62. (Original) A method according to claim 1 wherein said lithographic base is anodized aluminum.
63. (Original) A method according to claim 1 wherein said developer is an aqueous alkaline solution.
64. (Original) A method according to claim 63 wherein said solution has a pH in the range of 10-14.
65. (Original) A method according to claim 63 wherein said solution further includes one or more of:
- (a) an organic solvent;
 - (b) a surfactant; and
 - (c) a sequestering agent.
66. (Cancelled)
67. (Cancelled)
68. (Cancelled)
69. (Withdrawn) A masking fluid for forming a mask on the surface of a layer of positive-working radiation-imageable medium, comprising: (a) an active masking ingredient that is substantially resistant to a developer; and (b) a solvent capable of dissolving said active masking ingredient and of not substantially removing said positive-working radiation-imageable medium from a hydrophilic lithographic base.